

# The Urban Tree Planning and Planting Guide for Janesville and Rock County



Recommended Trees and Methods for Successful  
Terrace and Yard Planting

Prepared and Distributed by the Janesville Urban Forest Alliance and  
The Wisconsin Department of Natural Resources

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# Why should I plant trees on my property?

There are as many reasons to plant a tree as there are kinds of trees to plant. Trees absorb carbon dioxide and pollutants and give off the oxygen we need to breathe. The canopy of a large tree slows falling raindrops to allow precious moisture to gradually soak into the soil, instead of causing runoff and erosion. Trees around buildings provide cooling shade in the summer and slow the cold winds in the winter. Harsh noises are muffled by trees. Trees provide the food and cover needed to draw wildlife close to where we live. Beyond all of these “scientific” reasons to plant trees are the social and emotional benefits.

## **Trees make us feel good!**

Studies have shown that patients heal faster, and workers are more productive and absent less when they have a few of trees. Most people respond in a positive way to the beauty of trees. If you don't think so, try to picture your community without trees, or visit an area where the trees have been removed. Chances are you'll feel more tense and anxious in the treeless environment.

We admire trees for their stature, strength, and longevity. People often become attached to trees that have special meaning to them. Research has shown that trees in a neighborhood reduce the rates of violent crimes in adjacent residences and trees have been shown to increase property values.

## **So plant a tree!**

But first, please read on to learn about choosing the right tree, planting it properly and caring for it, so that it will serve as a living memorial to YOU and show that you care about the future.

# Things to do before planting

It's important to review the planting space where you intend to plant your tree. Will the tree affect your visibility when backing out of your driveway? Are there overhead power lines? When the tree is mature will it completely block the view out of your picture window? Take the time to understand how large your tree will be at maturity, and how large your planting site should be so you can match them to each other. All too often homeowners and utility companies must take drastic action because a large tree was planted in a small space.

## Measure your planting space

Measure the space you intend to fill with your new tree. Your tree may be small and cute when you plant it, but will it grow into a “mighty oak”? If so you may need to plant a tree that will have a smaller mature size.

## Are there utility lines overhead?

Don't plant trees that will require the utility companies to perform major pruning or even removal to protect your power, phone or cable lines from tree damage.

## Will there be enough ground space?

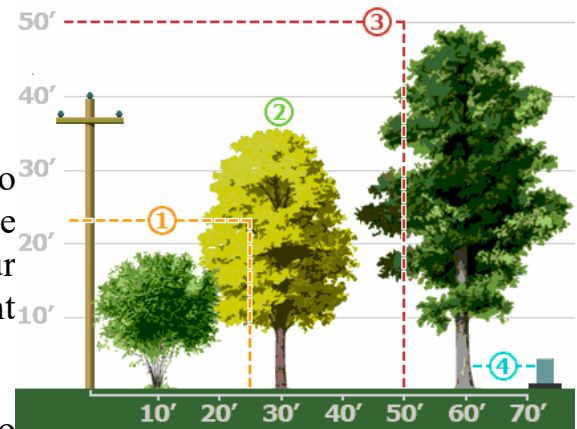
Don't try to fit a large tree into a two foot space. Trees require water, oxygen and nutrients. Large trees will live a stress-filled existence in a small place possibly leading to poor vitality and early removal.

## Will it get enough sunlight?

Find out where the sun angles are and make sure the tree is given adequate sunlight if it is shade intolerant. Check the tag or ask the nursery to see if your tree needs full sun. Oaks, hickories and ash trees require full sun while maples and elms will grow in the shade.

## Overhead and underground utilities

While checking your planting site be sure to account for overhead utility lines. These include distribution lines that could be along any side of your property and going to your house. See the Right Tree, Right Place chart on the right.



Underground lines are just as important to identify. You can mark the position where you would like to plant and call Digger's Hotline. Within three (3) working days your site will be located and safe planting sites can be identified.

**DIGGER'S HOTLINE – 1-800-242-8511**



Be ready to give them the following information:  
Name, address, county, type of work, how the site is marked and what area you need marked by them – for example a 10 foot radius for the planting site.

Depending upon your area various utilities such as gas lines, telephone lines, electric lines, storm and sanitary sewers, water lines, and cable television lines may be located underground on your property. You are responsible for any interruption of service to yourself or others if the area is not marked. It can also be very dangerous. Energized electrical lines and pressurized natural gas lines can cause great bodily harm and property damage when inadvertently broken into during landscaping operations.

# How to select and transport your tree

## Stock Selection

When shopping for your new tree there are a number of important points to consider. Just as when you are investing in a new home or car it is important to make a complete evaluation of the tree you will plant. Damaged or sick nursery plants will perform at less than their maximum potential.

## Damage or Poor Form

Examine all the branches and the stem closely for damage that has occurred in the nursery or garden center. Broken branches, particularly the terminal leader and its bud; scrapes or tears in the bark of the stem; pruning wounds that have not healed; bruises to the stem causing discoloration of the bark; double leaders (two main stems). Try to choose the best tree that is available. A small tree with no damage may be a more vigorous grower than a larger tree showing damage.

## Disease and Insects

During the growing season, when the trees have leaves on them, look for signs of poor growth, insect damaged leaves or insects themselves. Some trees are susceptible to various diseases. Look for mold or fungus growing on the leaves or wounds to the stem that have not healed. Some types of trees, like oaks, naturally have lichen growing on the stem. This is normal and should not be considered a problem. Common insect problems might be: Eastern tent caterpillars on fruit trees; leaf miners on birch; ash bugs on ash trees.

## Transporting your tree

Three main types of damage are common during transport: wind burn, stem and root damage. If your tree has leaves or active buds keep the top wrapped up during transport to prevent wind burn. Cushion the stem wherever it rests or tubs against any fixed object like a truck tailgate. Avoid excessive handling by the stem that will tear or rip small rootlets within the ball or pot or spill soil exposing the roots to sun and wind.

# City Ordinances

The City of Janesville ordinances address tree and shrub maintenance in Chapter 12.24. Adjacent property owners are required to trim trees to within the street right of way to 15 feet over the street and 7 feet over the sidewalk. This prevents trucks and buses from being damaged by the trees and allows the trash collectors to get close enough to the curb to provide efficient service. This also protects the terrace trees from damage.

Branches torn off by passing vehicles leave wounds that are open invitations to insect, disease and structural problems for trees. Vegetation below those heights must not extend over the street or the sidewalk. Additionally, trees and shrubs cannot block the vision triangle at intersections within 25' of the corner. Signs and signals must be kept clear and visible at all times.

To visit Janesville's tree and shrub ordinances go Chapter 12 of the City Ordinances book at:

<http://cms.ci.janesville.wi.us/weblink/Browse.aspx>

## ROCK COUNTY / JANESVILLE LANDFILL

The Demolition Landfill, where you can take your yard and tree waste, is open to city and county residents. Hours of operation from April to November are:

Monday and Thursday –	8:00 am to 7:00 pm
Tues., Wed., Friday –	8:00 am to 3:00 pm
Saturday –	8:00 am to 5:00 pm

From April through November there is an attendant. At others times you may get a key from the sanitary landfill. Brush and yard waste are picked up separately, twice a year, on your regular trash pickup day. This collection occurs during the first full week of May and the week after Thanksgiving. Waste must be bundled or bagged and bundles must be no larger than 12" diameter and 4 feet long. Call the City Services Center at 755-3110 for more information on landfill operations.

## RECOMMENDED STREET OR TERRACE TREES

The following trees have been recommended as being desirable terrace trees for streets. Terraces should be a minimum of four feet wide although small trees may survive in narrower planting areas. This is not a complete list and each tree may or may not be applicable for your location. Examine the qualities of each tree and explore alternatives at your nursery or with your local arborist.

### LARGE TREES (50'+)

- |   |  |
|---|--|
| • Ginko   | <i>Ginkgo biloba</i>   |
| • Hackberry   | <i>Celtis occidentalis</i>                                     |
| • Delaware American Elm   | <i>Ulmus Americana</i> 'Delaware'                              |
| • Homestead Elm   | <i>Ulmus carpinifolia</i>                                      |
| Note: This and other cultivars are resistant to Dutch Elm Disease |  |
| • Autumn Blaze Maple  | <i>Acer x freemanii</i> 'Autumn Blaze'                         |
| • Autumn Flame Red Maple  | <i>Acer rubrum</i> 'Autumn Flame'                              |
| • Skyline Honeylocust   | <i>Gleditsia triacanthos</i> var. <i>inermis</i> 'Skyline'     |
| • Shademaster Honeylocust   | <i>Gleditsia triacanthos</i> var. <i>inermis</i> 'Shademaster' |
| • Kentucky Coffeetree   | <i>Gymnocladus dioica</i>                                      |

### MEDIUM TREES (25-50')

- |                          |   |
|--------------------------|---|
| • Greenspire Linden      | <i>Tilia cordata</i> 'Greenspire'         |
| • Redmond Linden         | <i>Tilia Americana</i> 'Redmond'          |
| • European Hornbeam      | <i>Carpinus betulus</i>                   |
| • Yellowwood             | <i>Cladrastis lutea</i>                   |
| • Hophornbeam            | <i>Ostrya virginiana</i>                  |
| • Amur Chokecherry       | <i>Prunus mackii</i>                      |
| • Autumn Flame Pear      | <i>Pyrus calleryana</i> 'Autumn Flame'    |
| • Chanticleer Pear       | <i>Pyrus calleryana</i> 'Chanticleer'     |
| • Thundercloud Plum      | <i>Prunus x cerasifera</i> 'Thundercloud' |
| • Kwanzan Cherry         | <i>Prunus serrulata</i> 'Kwanzan'         |
| • Harvest Gold Crabapple | <i>Malus</i> 'Harvest Gold'               |



## SMALL TREES (up to 25')

- Amur Maple *Acer Ginnala*
- Autumn Brilliance Serviceberry *Amelanchier x grandiflora*
- Japanese Tree Lilac *Syringia reticulata*
- Thornless Hawthorn *Crataegus species*
- Sargent Cherry *Prunus sargentii*
- Crabapples *Malus species*

### Examples-crabapples: (all disease resistant)

- 'Adams' – to 24'; rounded; pink flowers; persistent yellow fruit
- 'Centurion' – to 25'; upright. oval; rose flowers; persistent glossy red fruit
- 'Donald Wyman' – to 20' h x 25' w; pink bud; white flower; persistent glossy red fruit
- 'Prairiefire' – to 20' h x 20' w; red bud; pinkish red flower; persistent dark red fruit
- 'Prof. Sprenger' – to 20' h x 20' w; pink bud; white flower; persistent yellow-red fruit
- 'Tina' – to 5' h x 4' w; pink bud; white to yellow flower; small red fruit

## RECOMMENDED YARD TREES

The following trees are recommended as good choices for your yard. These trees are not good for terraces however the terrace tree list is applicable to any yard location given adequate site conditions.

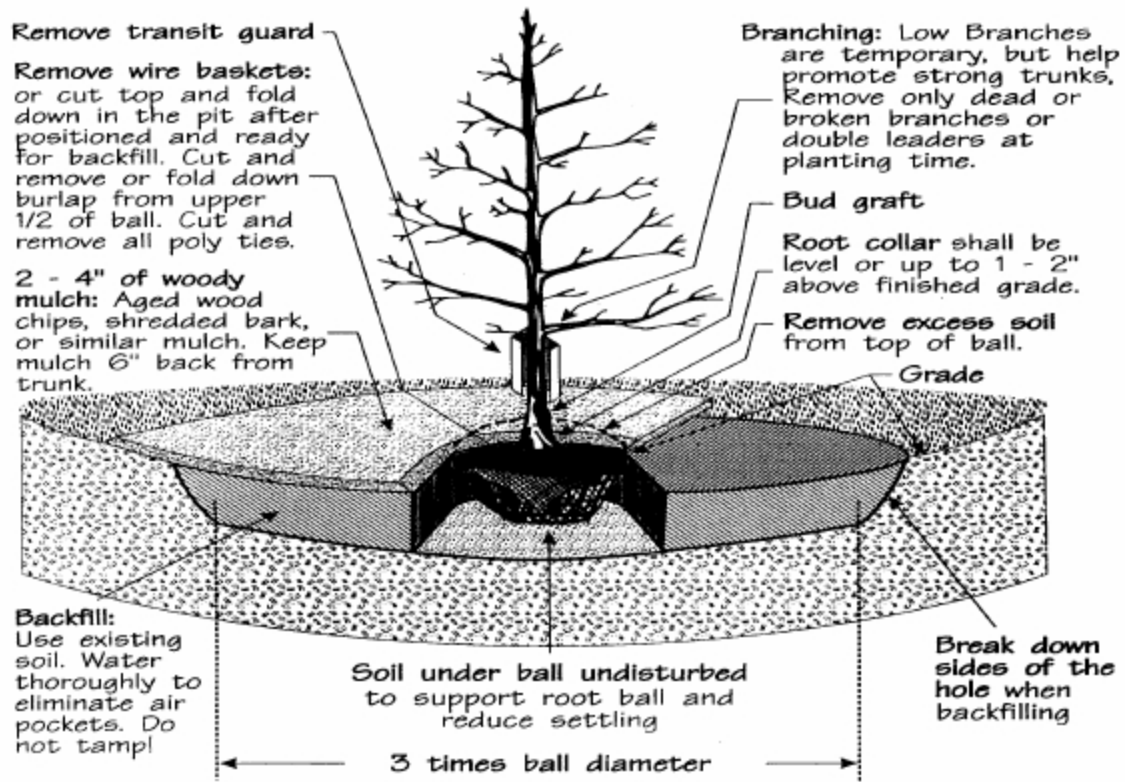
### LARGE TREES (50' and over)

- |                           |                         |
|---------------------------|-------------------------|
| • American Sycamore       | Platanus occidentalis   |
| • White Oak               | Quercus                 |
| • Bur Oak                 | Quercus macrocarpa      |
| • Red Oak                 | Quercus rubra           |
| • Black Oak               | Quercus velutina        |
| • Pin Oak                 | Quercus palustris       |
| • Black Walnut, Butternut | Juglans spp.            |
| • Sugar Maple             | Acer saccharum          |
| • Horsechestnut           | Aesculus hippocastanum  |
| • Kentucky Coffeetree     | Gymnocladus dioica      |
| • Eastern Cottonwood      | Populus deltoides       |
| • Shagbark Hickory        | Carya ovata             |
| • Norway Maples           | Acer platanoides        |
| <i>Red Varieties:</i>     | <i>Green Varieties:</i> |
| - Crimson King            | - Emerald Queen         |
| - Schwedler               | - Emerald Lustre        |
| - Royal Red               | - Superform             |

### MEDIUM TREES (25'-50')

- |                               |  |
|-------------------------------|--|
| • Various fruit bearing trees | Apple, plum, pear                        |
| • Evergreens                  | Some may be larger than 50'              |
| • Katsura Tree                | Cercidiphyllum japonicum                 |
| • Weeping Willow              | Salix babylonica                         |
| • Quaking Aspen               | Populus tremuloides                      |
| • Pagoda Dogwood              | Cornus alternifolia                      |
| • Hawthorn                    | Crataegus spp.                           |
| • Whitespire Birch            | Betula platyphylla japonica 'Whitespire' |
|                               | 'Autumn Brilliance'                      |

# Proper Tree Planting Diagram



David J. Stephenson

Graphic courtesy of Wisconsin DNR

## TREES INAPPROPRIATE FOR TERRACE PLANTING

The following trees are not appropriate for terrace planting for various reasons including excessive size, large amounts of litter, visibility problems, surface roots, weak woods, etc.

- |                            |                            |
|----------------------------|----------------------------|
| 1) Willow                  | <i>Salix spp.</i>          |
| 2) Silver Maple            | <i>Acer saccharinum</i>    |
| 3) Boxelder                | <i>Acer negundo</i>        |
| 4) Cottonwood, Poplar      | <i>Populus spp.</i>        |
| 5) Walnut                  | <i>Juglans nigra</i>       |
| 6) Catalpa                 | <i>Catalpa speciosa</i>    |
| 7) Mulberry                | <i>Morus spp.</i>          |
| 8) Tree of Heaven          | <i>Ailanthus altissima</i> |
| 9) Kentucky Coffeetree     | <i>Gymnocladus dioicus</i> |
| 10) Hawthorn (with thorns) | <i>Crataegus spp.</i>      |
| 11) Evergreens:            |                            |
| Pine                       | <i>Pinus spp.</i>          |
| Fir                        | <i>Abies spp.</i>          |
| Arborvitae                 | <i>Thuja spp.</i>          |
| Spruce                     | <i>Picea spp.</i>          |

## **Care and Maintenance of Your New Tree**

Now that your new tree is securely planted, mulched, staked if necessary and watered, what do you have to do? Generally, trees require just a few moments of attention throughout the year and they will reward you with all their benefits.

### **Regular Watering**

During the first year it is advisable to provide one inch (1") of water per week. If you water your lawn regularly it may take care of your new tree. It may also be necessary to provide sub-surface watering through the use of a root feeder. A root feeder allows water to penetrate into the lower soil levels where roots are found. When the weather turns hot and dry in the summer and you need a drink of water your tree probably does too! Watch the weather and the tree to see if it is under stress. If you see any wilting it's time to water!

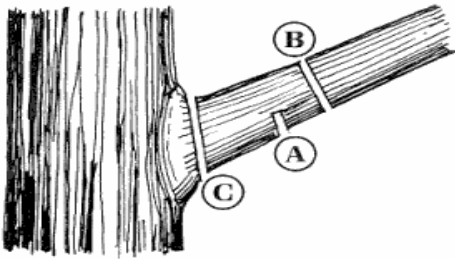
### **Protecting your tree from damage**

Many trees develop problems resulting from damage to the trunk, branches or roots. This kind of damage can be avoided with some planning and forethought.

- Don't allow string trimmers or mowers to bump into and scrape the bark of your tree! Use a mulch covered planting zone and a protective plastic collar to keep your tree from being scraped.
- Keep the collar on during the winter to prevent rodents from gnawing or eating the tender young bark of your tree.
- Keep car doors from banging into trees by strategically locating trees away from car entry and exit areas.
- Don't push snow from your driveway onto or against your tree's trunk. This may cause bark damage.

## Care and Maintenance of Your New Tree (con't)

### Pruning



Trees don't usually require pruning at planting time. Pruning during the first year should be minimal. The tree's first new job is to provide food for root growth and leaves furnish that energy. The three things to look for at planting time are broken branches, crossed branches and double leaders.

**Broken Branches:** Cut the branch using a pruner, lopper or pruning saw, depending on the size of the branch, approximately 1/4" from the stem. Don't leave branch stubs or rip the bark by letting the branch fall without an undercut. An undercut below the pruning cut allows the bark to separate without tearing. These are wounds that the tree will have difficulty healing.

**Crossing Branches:** Often a young tree will have branches which cross and rub on each other. Try to eliminate branches that cross as well as multiple branches that arise from a common growing point.

**Double Leaders:** Sometimes a tree will have that compete to be the leader, or main tip. The tree will benefit from having one of the leaders removed. Pick the one that is weaker or more deformed for removal.

**Tree Wrap and Staking:** Trees don't usually need wrap and staking. In fact, research has shown that trees develop stronger stems when not staked. These two items, however, will protect your tree from mower and trimmer damage as well as vandalism. If you do wrap and stake your tree, be sure to remove the wrapping and hardware prior to the second growing season after planting.

**Fertilizing:** Fertilization of your new tree is not usually necessary immediately. In fact, some research has shown that fertilizing a new tree puts extra stress on the tree to produce leaves and flowers when the tree really needs to use that energy to establish its root system. As the tree becomes established, or if you see that your tree is under stress, you may wish to have a qualified arborist test the soil for nutrients and suggest a plan of action if a problem is found.

## Care and Maintenance of Your New Tree (con't)

**Weed Control:** It is a good idea to keep the area immediately around the tree (a circle approximately 3' in diameter) free of all other vegetation including grass. This allows the tree roots to breathe freely without competition for oxygen, water or nutrients. Herbicides that act only by being absorbed through the leaves may be used (such as a short-term, broad spectrum herbicides containing glyphosate or natural preparations such as vinegar and salt). Do not spray chemicals on the stem as it will absorb them and cause stress. Organic mulch around the base of the tree will help keep the roots cool and moist while keeping the weeds down.

A 6" diameter plastic PVC drain tile, 8"-12" tall, cut lengthwise along one side and placed around the tree will prevent damage from mowers, string trimmers and rodents in the winter. This is particularly important for young fruit trees including flowering pears and crabapples, which are favorite foods for field mice and voles.

**Insect and Disease Problems:** Your tree needs continuous monitoring to be sure that it does not become a victim to disease or insect damage. While some damage cannot be controlled without a major expenditure, some things are relatively easy to control. A leaf roller insect or young Eastern tent caterpillar infestation can often be controlled by picking the insects off the tree. Other problems, like the bronze birch borer on white birch, require systemic insecticides and perhaps the assistance of a professional arborist. Your constant vigilance is the best guarantee of early diagnosis and treatment.

## This Brochure

This brochure has been produced by the Janesville Urban Forest Alliance - JUFA (formerly Janesville Shade Tree Advisory Committee - JSTAC) with assistance from the Wisconsin Department of Natural Resources, Urban Forestry Division and the city of Janesville Parks Department.



For more information about these organizations or the Community Foundation of Southern Wisconsin (CFSW) please call the Foundation at 608-758-0883. For more copies of this brochure, more information about street tree planting or any urban forestry question please call the parks Division of Janesville Leisure Services at 608-755-3025.

JUFA is a non-profit group of local professionals and interested citizens whose primary mission is the support and preservation of Janesville's urban forest. For more information about JUFA visit our website at [www.JUFA1.org](http://www.JUFA1.org) or by email [jufa.mary@gmail.com](mailto:jufa.mary@gmail.com) or by snail mail at JUFA, Secretary/Treasurer Mary Thompson, 114 N Atwood Ave., Janesville, WI 53545